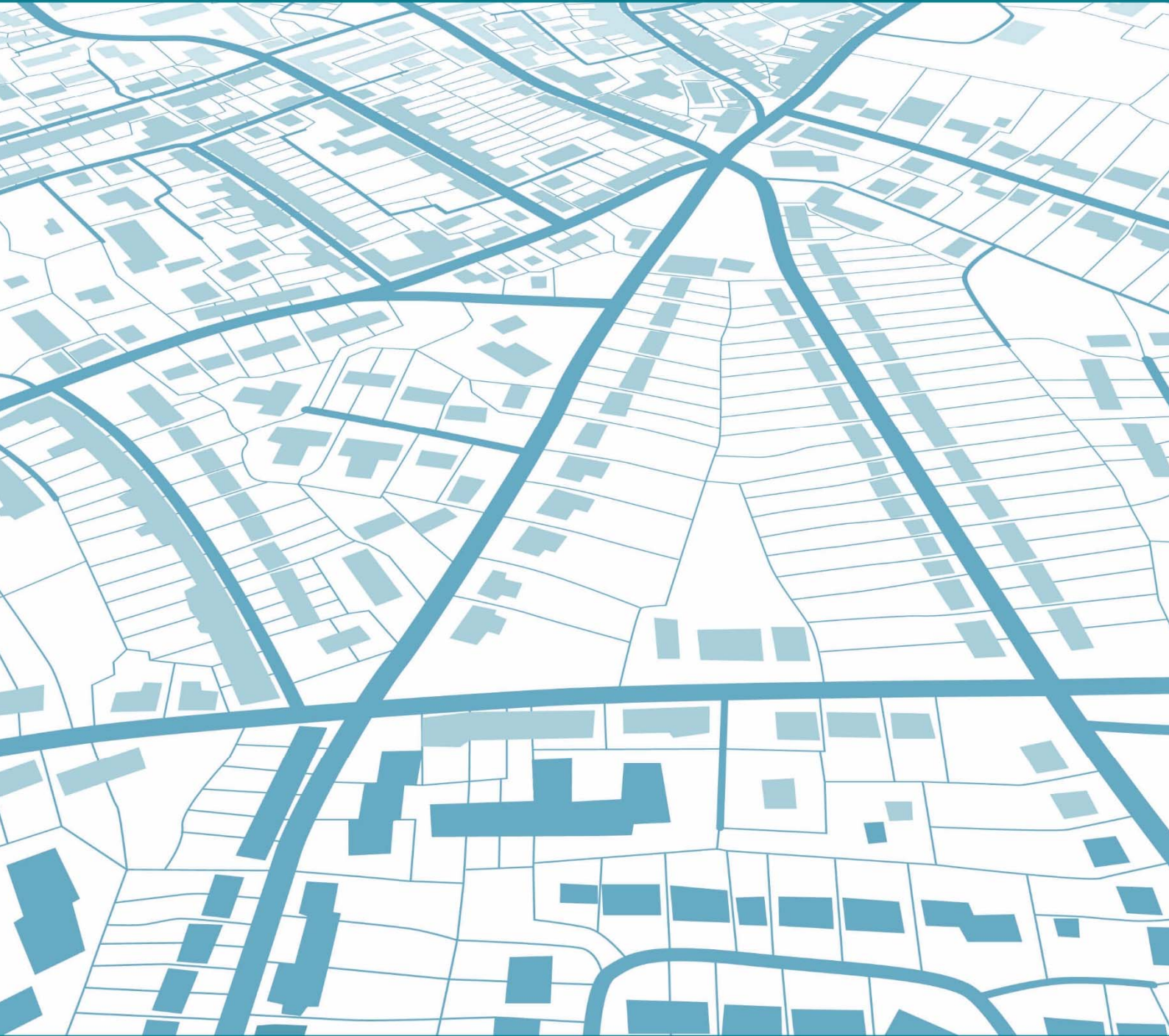




CFC Group

Proposed Warehouse and Showroom Facility Bringelly Road Business Hub

Traffic and Parking Impact Assessment

Ref: 18161

Date: September 2018

Issue: D

Table of Contents

1.0	INTRODUCTION	1
2.0	PROPOSED DEVELOPMENT	3
2.1	Site, Context and Existing Circumstances.....	3
2.2	Bringelly Road Business Hub	3
2.2	Proposed Development.....	4
3.0	ROAD NETWORK AND TRAFFIC CONDITIONS	6
3.1	Road Network.....	6
3.2	Traffic Controls	7
3.3	Traffic Conditions	7
3.4	Transport Services	8
4.0	SUSTAINABLE TRAVEL PLAN	9
5.0	PARKING	10
6.0	TRAFFIC	11
7.0	CONSTRUCTION TRAFFIC MANAGEMENT PLAN.....	13
8.0	ACCESS, INTERNAL CIRCULATION AND SERVICING	14
8.1	Access.....	14
8.2	Internal Circulation	14
8.3	Servicing	14
9.0	CONSULTATION PROCESS.....	15
10.0	CONCLUSION	16

List of Figures

Figure 1	Location	Figure 5	Projected 2026 & 2031
Figure 2	Site		Traffic Volumes
Figure 3	Road Network	Figure 6	Truck Routes
Figure 4	Traffic Controls		

List of Appendices

Appendix A	SEARs Requirements
Appendix B	Architectural Plans
Appendix C	Turning Path Assessment
Appendix D	Consultation Process

1.0 Introduction

A Staged Development Application (SSD 6324) has been approved by the Minister for Planning and Environment for a Concept Plan for Bringelly Road Business Hub (BRBH) as part of the Western Sydney Parklands landholding on Bringelly Road at Leppington.

This Traffic Impact Assessment has been prepared in relation to a proposed warehouse and showroom facility on Lot 6 in the BRBH (Figure 1). The proposed development scheme for CFC Group involves:

Warehouse	2,456m ²
Office	640m ²
Showrooms	1,575m ²
Workshop	1,740m ²
Warehouse drive-through and open machinery display area	

The report responds to the SSD Consent which specifies the following in regards to Traffic and Access:

- ❖ *B7: Future development applications shall be accompanied by a detailed assessment of the traffic, and transport impacts on the surrounding road network and intersection capacity and shall detail provisions demonstrating that sufficient loading/unloading, access and car parking has been provided having regard to the RMS' Guide to Traffic Generating Developments, and details to promote non-car travel modes. The traffic and transport impact assessment shall also have specific regard to the scope and timing of road infrastructure works in the surrounding road network.*
- ❖ *B8: To ensure that potential conflicts between heavy vehicles and light vehicles are minimised, future development applications for large format retail development shall include details demonstrating satisfactory arrangements have been made to separate heavy and light vehicle movements via a truck service lane or the like.*

- ❖ *B9: To ensure that sustainable transport modes are supported, all future development applications for new built form shall include a sustainable travel plan and details that pedestrian and cyclist facilities have been incorporated into the proposed development.*
- ❖ *B10: Future development applications must provide car parking at the following rates:*

Land Use	Minimum Car Parking Requirement
<i>Large Format Retail</i>	• 1 space per 50m² of GFA
<i>Industrial/Warehouse</i>	• 1 space per 40m² of office GFA • 1 space per 100m² of factory GFA for the 100m², then 1 space per 200m² of GFA (includes office component) • 1 space per 300m² of warehouse GFA, plus 1 space per 40m² of office GFA
<i>Other Retail</i>	• 1 space per 6 seats (external and internal) of takeaway food and drink premises GFA, plus queuing • 2 spaces per service station fuel outlet, 1 space per 20m² of ancillary convenience store GFA, 3 spaces per service bay plus 1 space per employee; and • 1 space per 20m² of restaurant or café GFA.

In addition to the above, the assessment also has regard for the comments and the SEARs requirements outlined in the DoPE, TfNSW and RMS correspondences which are reproduced in Appendix A.

The purpose of this report is to:

- ❖ describe the site and the proposed development scheme
- ❖ describe the road network serving the site and the prevailing traffic conditions
- ❖ assess the adequacy of the proposed parking provision
- ❖ assess the potential traffic implications
- ❖ assess the suitability of the proposed vehicle access, internal circulation and servicing arrangements
- ❖ respond to the SSD Consent Conditions and relevant SEARs requirements

2.0 Proposed Development

2.1 Site, Context and Existing Circumstances

The Bringelly Road Business Hub occupies a total area of some 21ha incorporating some 8,000m² of the former Bringelly Road reservation. The development site (Figure 2) is Lot 6 within the BRBH subdivision being an irregular shaped allotment of some 22,005m² with a frontage to the proposed Skyline Crescent which will connect to Bringelly Road.

The site is located just to the west of Cowpasture Road and to the north of the South West Rail Line being some 2.5 km to the east of Leppington Railway Station and the future commercial centre.

The surrounding uses comprise:

- ❖ the adjoining Lot 8 which is subject to a development proposal for Nulon Motor Oils
- ❖ the adjoining rural residential property to the east with access provided by Bringelly Road and the Horningsea Park residential area on the eastern side of Cowpasture Road
- ❖ the rural residential lands to the west and south
- ❖ the Carnes Hill residential area and Western Sydney Parklands extending to the north

2.2 Bringelly Road Business Hub

The SSD consent provides for the site to be cleared with earthworks undertaken to provide for the new access road system and site “benching” etc.

The proposed subdivision involves 8 lots with an envisaged range of future uses including Large Format Retail, Light industry and Service Centre. The access road system (Skyline Crescent) will:



LEGEND		SITE
FIG 2		

Transport and Traffic Planning Associates

- ❖ connect to Bringelly Road
- ❖ provide for a potential connection to another WSP landholding to the west which is envisaged to be developed for tourism, sporting and active hub uses
- ❖ provide an emergency link to Stuart Road
- ❖ maintain access for the adjoining rural residential property to the east

Details of the proposed lot layout and access road system are provided on the diagram overleaf.

2.2 Proposed Development

The CFC Group, which was established in the 1970's, is involved with equipment distribution, transport/logistics and specialised mining, utility and infrastructure services. The CFC Group will bring 3 of its businesses together at the proposed facility including:

- ❖ CEA
- ❖ JCB
- ❖ Redstar Equipment

These companies are presently separately located in the Greater Sydney area and the development proposal will provide for the relocation/ colocation of the companies in the BRBH.

The proposed development scheme involves minor earthworks to provide level platforms for the building and hardstand areas and to install services. The new building complex will be constructed centrally on the site with the warehouse on the western side, a workshop on the eastern side, showrooms on the southern side with an office above.

REVISIONS

A	PRELIMINARY	25.05.18
B	CO-ORDINATION ISSUE	03.09.18
C	CO-ORDINATION ISSUE	06.09.18

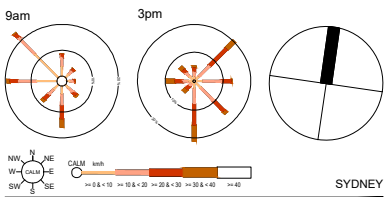
OVERALL SUMMARY

DEVELOPABLE AREA	169,730 sqm
SKYLINE CRESCENT	19,280 sqm
TOTAL SITE AREA	189,010 sqm

GROSS FLOOR AREA (GFA)

LIGHT INDUSTRIAL	76,859 sqm
LARGE FORMAT RETAIL	4,750 sqm
OTHER RETAIL	0 sqm

TOTAL GFA	81,609 sqm
-----------	------------



PROJECT
CFC GROUP
BRINGELLY ROAD
BUSINESS HUB,
NSW

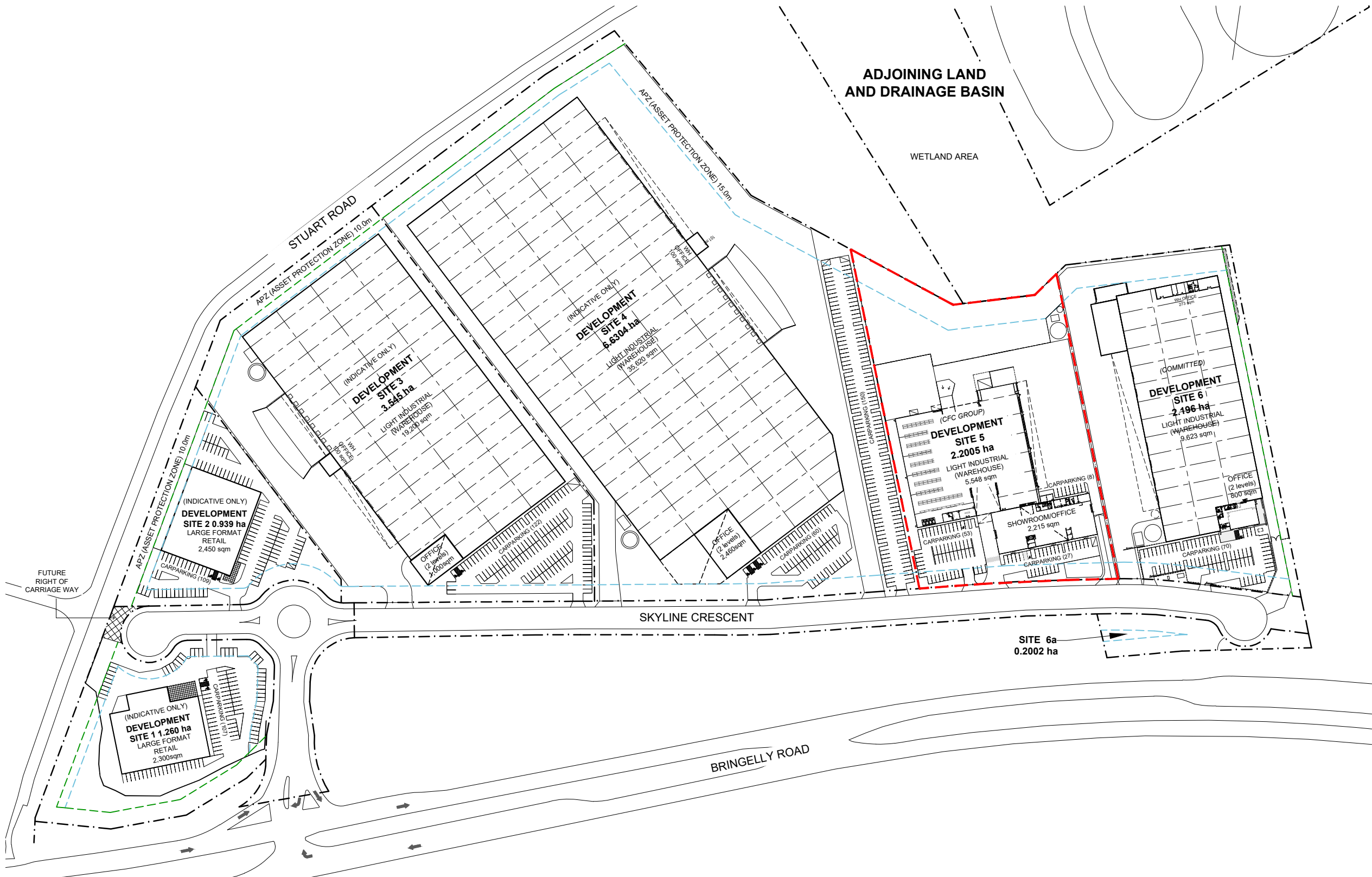
DRAWING TITLE
MASTERPLAN



CREATE DATE : 22.05.2018
LAST SAVED BY : awong
PLOT DATE : 25.05.2018

2-352-275907-FS20 -002

C



DEVELOPMENT SITE 1	12,600 sqm
INCLUDING FUTURE RIGHT OF CARRIAGE WAY	
RETAIL	2,300 sqm
EFFICIENCY	17.22 %
CARPARKING PROVIDED	107 spaces

DEVELOPMENT SITE 2	9,394 sqm
RETAIL	2,450 sqm
EFFICIENCY	26.01 %
CAR PARKING PROVIDED	109 spaces

DEVELOPMENT SITE 3	35,458 sqm
WAREHOUSE	19,200 sqm
WAREHOUSE OFFICE	100 sqm
OFFICE (2 levels)	1,000 sqm
TOTAL BUILDING AREA	20,300 sqm
EFFICIENCY	57.25 %
CAR PARKING PROVIDED	122 spaces

DEVELOPMENT SITE 4	66,304 sqm
WAREHOUSE	35,620 sqm
WAREHOUSE OFFICE	100 sqm
OFFICE (2 levels)	2,460 sqm
TOTAL BUILDING AREA	38,180 sqm
EFFICIENCY	57.58 %
CAR PARKING PROVIDED	210 spaces

DEVELOPMENT SITE 5	22,005 sqm
WAREHOUSE/WORKSHOP	5,548 sqm
SHOWROOM (ground)	1,575 sqm
OFFICE (level 1)	640 sqm
TOTAL BUILDING AREA	7,763 sqm
EFFICIENCY	35.28 %
CAR PARKING PROVIDED	88 spaces

DEVELOPMENT SITE 6	21,967 sqm
(COMMITTED)	
WAREHOUSE	9,623 sqm
WAREHOUSE OFFICE	273 sqm
OFFICE (2 levels)	800 sqm
TOTAL BUILDING AREA	10,696 sqm
EFFICIENCY	48.69 %
CAR PARKING PROVIDED	70 spaces

DISCLAIMER - LEVELS AND LAYOUTS
ARE INDICATIVE ONLY AND SUBJECT
TO FINAL DESIGN

Transport and Traffic Planning Associates

The development will comprise:

Warehouse	2,456m ²
Office	640m ²
Showrooms	1,575m ²
Workshop	1,740m ²
Warehouse Drive-Through	1,075m ²
Total:	7,486m²

There will be a warehouse drive-through along the centre of the building complex and a frontage open machinery display area. It is proposed to provide a total of 88 parking spaces in frontage areas with 3 access driveways for cars and trucks on the Skyline Crescent frontage.

Details of the proposed development are provided on the plans which accompany the Development Application and are reproduced in part in Appendix B.

3.0 Road Network and Traffic Conditions

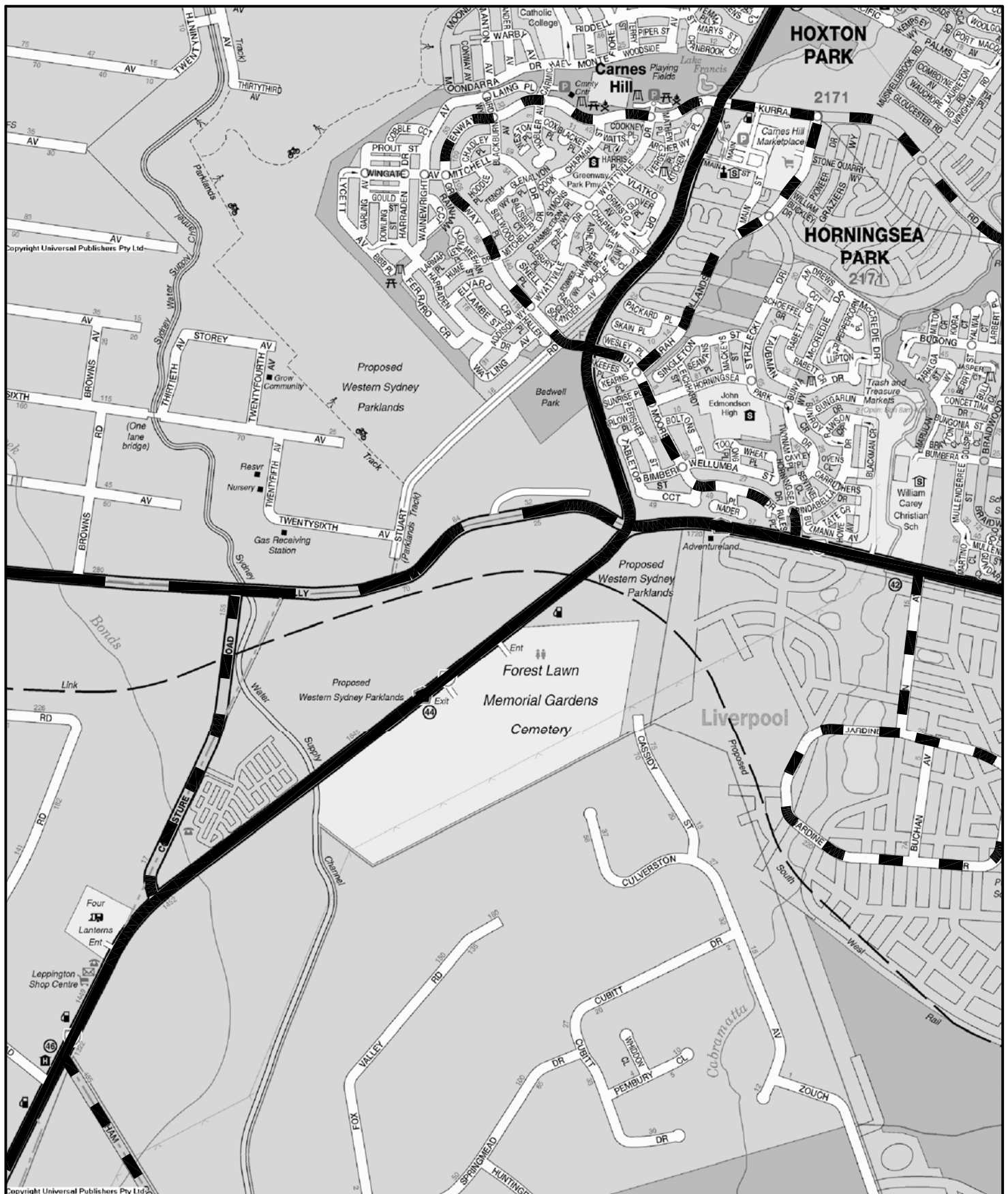
3.1 Road Network

The existing road network serving the site (Figure 3) comprises:

- ❖ *Camden Valley Way* – a State Road and arterial route which connects between the Hume Highway at Casula and Camden
- ❖ *Cowpasture Road* – a State Road and arterial route which connects between the Horsley Drive at Bossley Park and Camden Valley Way at Horningsea Park
- ❖ *Bringelly Road* – a State Road and sub-arterial route which connects between Cowpasture Road / Camden Valley Way at Horningsea Park and The Northern Road at Bringelly
- ❖ *Cowpasture Road (South)* – a State Road and Collector route which connects between Camden Valley Way and Bringelly Road
- ❖ The collector road systems serving Horningsea Park, Carnes Hill and Edmondson Park
- ❖ *Stuart Road* – a local access road, connecting to Greenway Drive

RMS are upgrading Bringelly Road over the 10km length between Camden Valley Way and The Northern Road and this work will complement the completed work on Camden Valley Way and current construction for The Northern Road.

The upgrade works on Bringelly Road are being staged and construction commenced in 2016 with the suggested schedule for completion reproduced overleaf from the AECOM Traffic and Transport Modelling Assessment undertaken for RMS.



LEGEND

-  ARTERIAL
-  SUB-ARTERIAL
-  COLLECTOR



ROAD NETWORK

FIG 3

Table 1: Intersection upgrade staging

Intersection	2011	2016	2021	2026	2031	2036
The Northern Road	Existing layout	Extend turning bay lengths	Upgrade intersection - two lanes on Bringelly Road approaches	-	-	Ultimate layout
Kelvin Park Drive	Existing layout	-	Upgrade intersection - signalisation and two lanes on Bringelly Road approaches	-	-	Ultimate layout
Jersey Road	Existing layout	-	Upgrade intersection * - signalisation and two lanes on Bringelly Road approaches	-	-	Ultimate layout
Masterfield Street	Existing layout	-	Upgrade intersection - two lanes on Bringelly Road approaches (priority intersection)	-	Upgrade intersection - signalisation and two lanes on Bringelly Road approaches	Ultimate layout
North Avenue	Existing layout	-	Upgrade intersection *- signalisation and two lanes on Bringelly Road approaches	-	-	Ultimate layout
King Street	Existing layout	-	Upgrade intersection - signalisation and two lanes on Bringelly Road approaches	-	-	Ultimate layout
Eastwood Road	Existing layout	-	Upgrade intersection *- signalisation and three lanes on Bringelly Road approaches	-	-	Ultimate layout
Fourth Avenue	Existing layout	-	Upgrade intersection - signalisation and three lanes on Bringelly Road approaches	-	-	Ultimate layout
Edmondson Avenue	Existing layout	Upgrade intersection - signalisation and three lanes on Bringelly Road approaches	-	Ban northbound and southbound right turn movements	Ban eastbound right turn movement	Ultimate layout
Browns Road	Existing layout	-	Upgrade to T intersection - signalisation and three lanes on Bringelly Road approaches	-	-	Ultimate layout
Cowpasture Road	Existing layout	Upgrade intersection - signalisation and two lanes on Bringelly Road approaches	-	-	Upgrade intersection - three lanes on Bringelly Road approaches	Ultimate layout

Source: AECOM, 2011

*- including an interim U-turn facilities to assist with local access with the upgrade of Bringelly Road to a divided carriageway

3.2 Traffic Controls

The existing traffic controls on the road network (Figure 4) comprise:

- ❖ the 70 kmph speed restriction on Bringelly Road east of Cowpasture Road (South) and 80 kmph to the west
- ❖ the traffic signals at the Bringelly Road, Cowpasture Road and Camden Valley Way intersection
- ❖ the central median island along Cowpasture Road

Details of the current and proposed arrangements at the Bringelly Road and Access Road intersection are provided on the image and plan overleaf.

3.3 Traffic Conditions

The projected traffic volumes at the Bringelly Road and Skyline Crescent intersection are identified in the study¹ undertaken for the SSD application in Figures 5a and 5b for the envisaged 80% and 100% completion of the BRBH development.

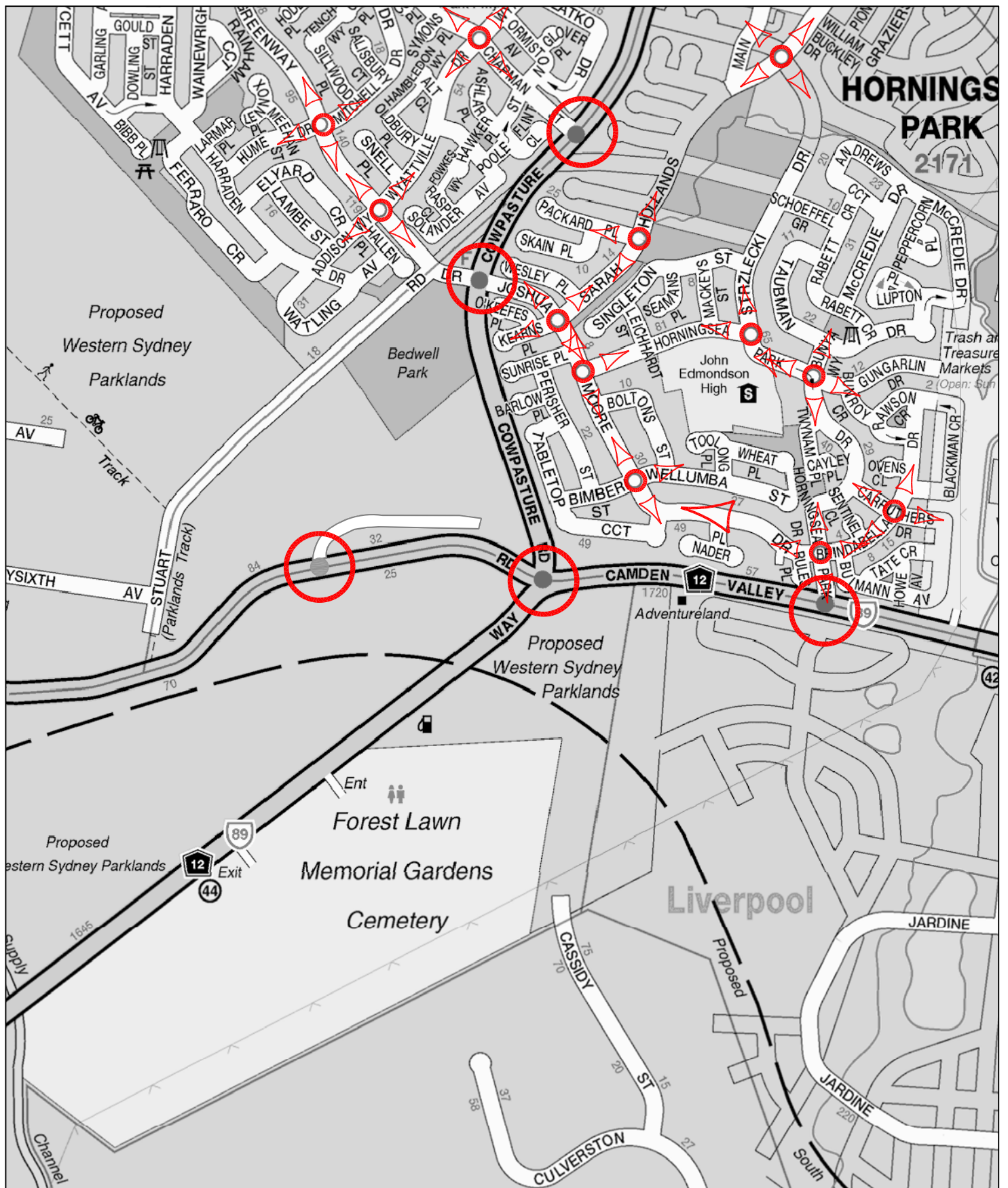
The operational performance of the Bringelly Road/Skyline Crescent intersection as assessed in the study had regard for the staging of the upgrade works and increasing traffic demands reveals the following operational satisfactory projected performances.

	AM		PM	
	LOS	AVD	LOS	AVD
2026*	A	10.5	B	22.4
2031**	A	11.1	C	25.6

*Bringelly Road 4 lanes, right turn 1 lane

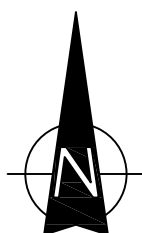
**Bringelly Road 6 lanes, right turn 2 lanes

¹ Western Sydney Parklands
Bringelly Road Business Hub
Traffic Impact Assessment
TTPA Dec. 2014



LEGEND

-  TRAFFIC SIGNAL CONTROL
-  ROUNDABOUT
-  RESTRICTED TURNING MOVEMENT

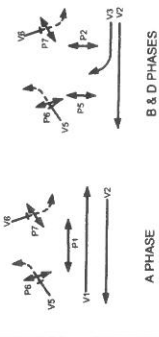


TRAFFIC CONTROLS

FIG 4



DRAWN BY CADD
DO NOT AMEND MANUALLY

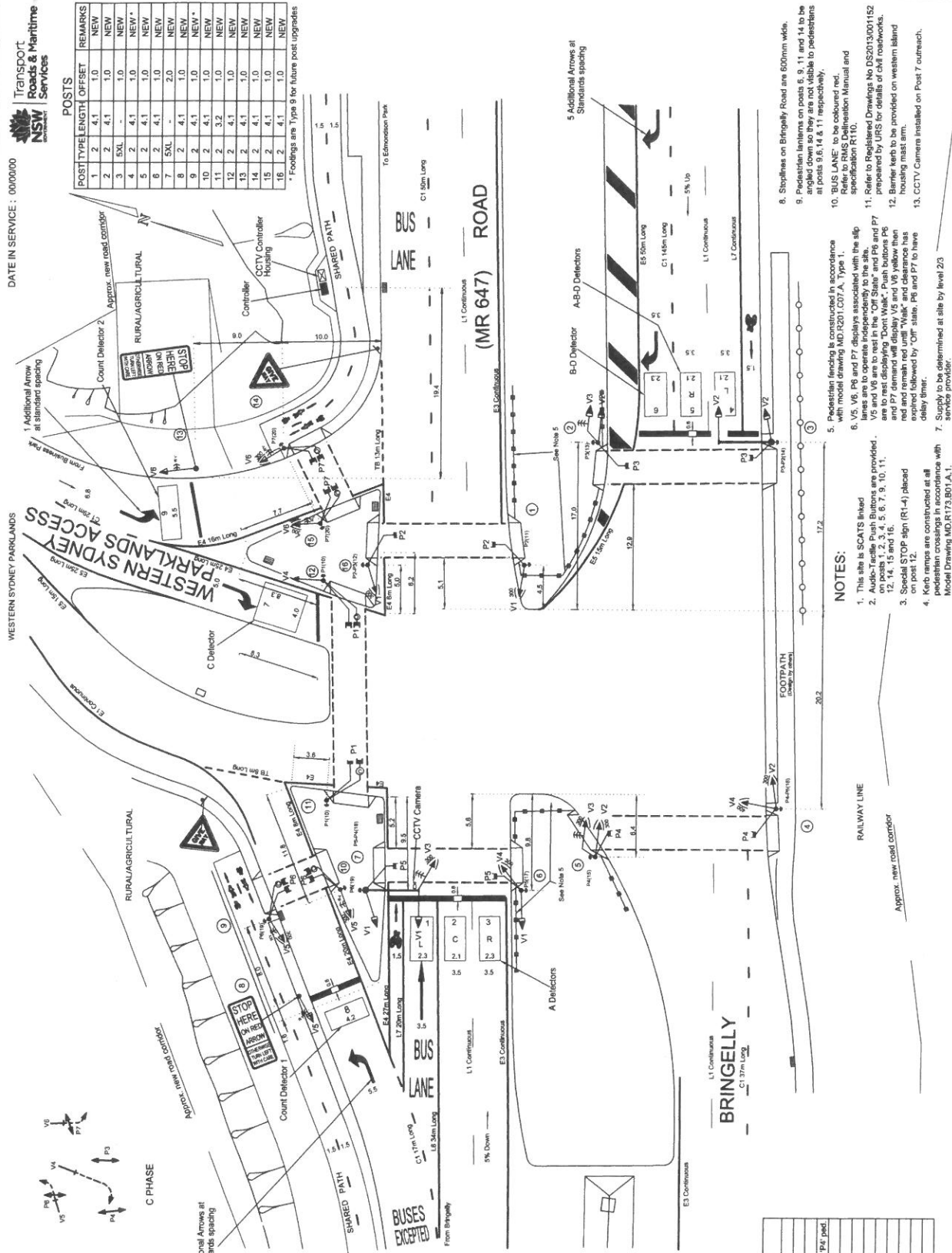


MOVEMENTS

[illegible]

SIGNAL GROUP/PHASE CHART

SIGNAL GROUP	SIGNALS WHEN GREEN STANDARD				REMARKS
	A	B	C	D	
V1	X				
V2	X	X			
V3	X	X	X		
V4				X	
V5					
V6					
P1	X				Full Red protection for P2 pad
P2		X	X		See note 6
P3			X		See note 6
P4		X	X		See note 6
P5		X	X	X	See note 6
P6		X	X	X	See note 6
P7		X	X	X	See note 6

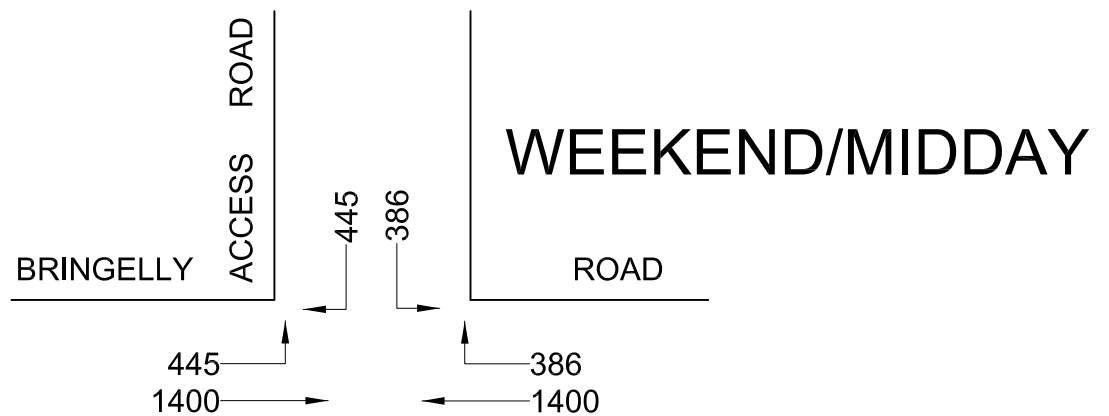
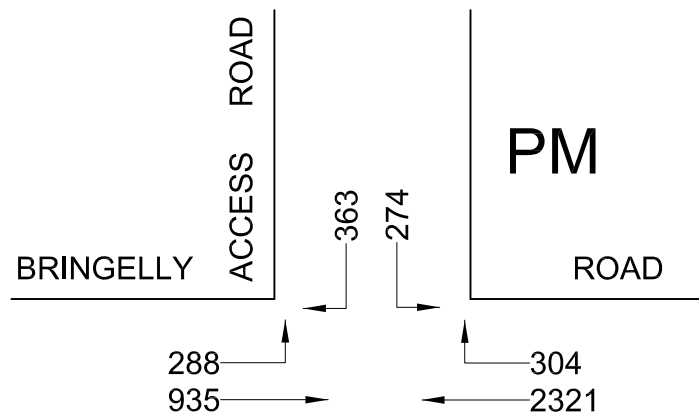
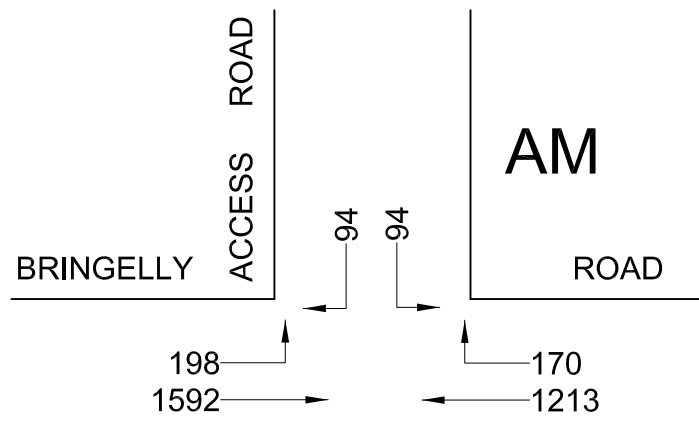


NOTES:

6. V5, V6, Pq and P7 displays associated with the same lanes are to operate independently to the other lanes as per normal.
7. Supply to be determined at site by level 2/3

Model Drawing MD R173.B01.A.1.

[illegible]

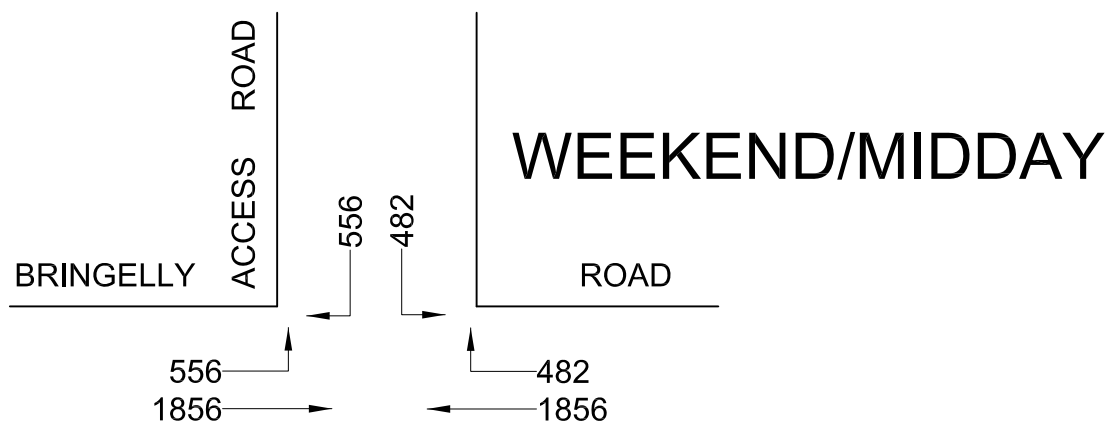
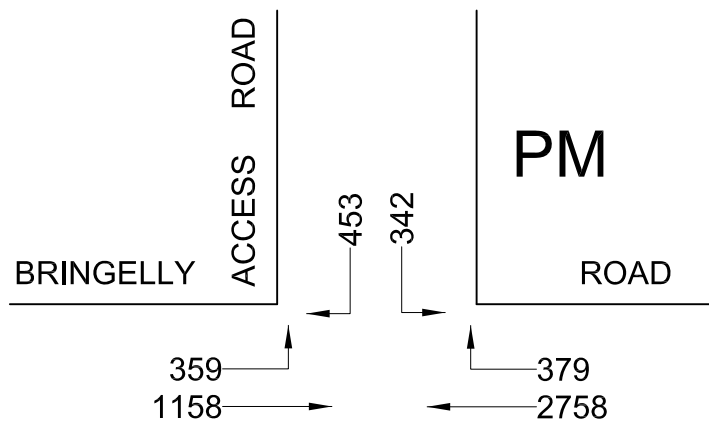
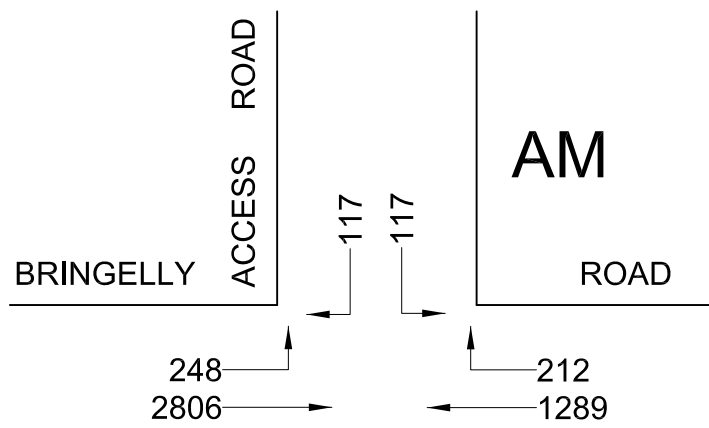


LEGEND



**PROJECTED 2026
VOLUMES
WITH DEVELOPMENT
80% TAKE UP**

FIG 5a



LEGEND



**PROJECTED 2031
VOLUMES
WITH DEVELOPMENT
100% TAKE UP**

FIG 5b

Similarly, the operational performance of the Bringelly Road/Cowpasture Road intersection as assessed in the AECOM study having regard for the same upgrade works and increased traffic demand reveal the following projections:

	Levels of Service	
	AM	PM
2016	B	B
2021	B	B
2026	B	B
2031	B	C
2036	C	C

The criteria for interpreting SIDRA Level of Service output is reproduced overleaf. It would now appear however that the nature of development uses that will eventuate on BRBH will be of a much lower traffic generation nature than envisaged for the SSD process.

3.4 Transport Services

The Leppington Railway Station, some 2.7km to the west, provides 20-30 minutes frequency train services while 30-minute to hourly Interline bus services operate along Camden Valley Way (routes 851, 855, 856 and 857) and Horningsea Park Drive (routes 852, 854 and 864) within 600m from the site.

It is inevitable that as the upgrade of Bringelly Road is completed and development occurs in the frontage lands that bus services will be provided along Bringelly Road taking advantage of the bus stop and priority provisions incorporated into the Bringelly Road upgrade scheme.

Criteria for Interpreting Results of SIDRA Analysis

1. Level of Service (LOS)

LOS	Traffic Signals and Roundabouts	Give Way and Stop Signs
'A'	Good	Good
'B'	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
'C'	Satisfactory	Satisfactory but accident study required
'D'	Operating near capacity	Near capacity and Accident Study required
'E'	At capacity; at signals incidents will cause excessive delays. Roundabouts require other control mode	At capacity and requires other control mode
'F'	Unsatisfactory and requires additional capacity	Unsatisfactory and requires other control mode

2. Average Vehicle Delay (AVD)

The AVD provides a measure of the operational performance of an intersection as indicated on the table below, which relates AVD to LOS. The AVD's listed in the table should be taken as a guide only as longer delays could be tolerated in some locations (ie inner city conditions) and on some roads (ie minor side street intersecting with a major arterial route).

Level of Service	Average Delay per Vehicle (secs/veh)	Traffic Signals, Roundabouts	Give Way and Stop Signs
A	Less than 14	Good operation	Good operation
B	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
C	29 to 42	Satisfactory	Satisfactory but accident study required
D	43 to 56	Operating near capacity	Near capacity and accident study required
E	57 to 70	At capacity; at signals incidents will cause excessive delays. Roundabouts require other control mode	At capacity and requires other control mode

3. Degree of Saturation (DS)

The DS is another measure of the operational performance of individual intersections.

For intersections controlled by **traffic signals**¹ both queue length and delay increase rapidly as DS approaches 1, and it is usual to attempt to keep DS to less than 0.9. Values of DS in the order of 0.7 generally represent satisfactory intersection operation. When DS exceeds 0.9 queues can be anticipated.

For intersections controlled by a **roundabout or GIVE WAY or STOP signs**, satisfactory intersection operation is indicated by a DS of 0.8 or less.

¹ the values of DS for intersections under traffic signal control are only valid for cycle length of 120 secs

4.0 Sustainable Travel Plan

Achieving a sustainable non-car travel mode outcome for the proposed development will be facilitated by:

- ❖ The bus stops that will be provided in the bus bays located on both sides of Bringelly Road adjacent to the BRBH access intersections. The bus services will provide connections to the surrounding residential areas, the railway stations at Leppington and Liverpool and inter-connection with other regional bus services.
- ❖ The shared path provided along the northern side of Bringelly Road which will connect to the regional bicycle and pedestrian network
- ❖ The provision of traffic signals at the Bringelly Road and Skyline Crescent access intersection which will incorporate pedestrian and cyclist crossing facilities
- ❖ The provision of lockers and shower facilities
- ❖ The provision for bicycle parking

A Green Travel Plan incorporating a Transport Access Guide will be prepared and submitted as part of the Construction Certificate documentation.

5.0 Parking

Application of the SSD parking criteria to the proposed development would indicate the following:

Warehouse	2,456m ²	@ 1 per 300m ²	9 spaces
Office	640m ²	@ 1 per 40m ²	16 spaces
Showroom (Retail)	1,575m ²	@ 1 per 50m ²	32 spaces
Workshop (Factory)	1,740m ²	@ 1 per 100m ²	18 spaces
Total:			75 spaces

It is proposed to provide a total of 88 parking spaces and this will also accommodate visitor/customer parking and shift change circumstances. The provision will include 2 accessible spaces and it is apparent that this will be a quite adequate parking provision for the needs of the development, particularly as there will also be large hard stand areas available should any contingent need arise.

6.0 Traffic

The Traffic Assessment for the BRBH (SSD 6324) identified a projected total traffic generation for the 18.5ha of developable land of:

Assessed Traffic Outcome	Traffic Generation Rate
AM 536 vtp	29 vtp per ha
PM 1,064 vtp	57.5 vtp per ha

The proposed development on Lot 6 with a gross area of 2.005ha would, on this basis, generate the following envisaged (and approved) traffic outcome:

AM	59 vtp
PM	116 vtp

The CFC Group will have a workforce comprising:

Warehouse/Workshop	40 staff	Monday - Friday
Office/showroom	30 staff	Monday - Friday
Sales (work "on the road" or at home with occasional visits to the Head Office)	10 staff	Monday - Friday

The warehouse/workshop staff start at 7 am and finish at between 3 pm and 5 pm. The office/showroom staff have flexible start/finish times (no fixed shifts) starting between 8 am and 9 am and finishing between 4.30 pm and 6 pm. There are also some service staff who generally work off-site and technical staff who occasionally work on Saturday and Sunday between 6 am and 4 pm.

Other vehicle movements will comprise:

Couriers	small vans and trucks	80 to 100 visits per week
Deliveries (containers and machinery)	Semi-trailers and some B-Doubles	20 to 25 visits per week
Other Deliveries and Dispatches (customer collection, Coates Hire)	Tilt tray trucks	25 to 30 visits per week

Assessment of these activities with advice from the various CFC company representatives indicates the following projected traffic generation for the proposed development in the AM and PM road network peak periods:

	AM (7-8)		PM (4.30-5.30)	
	IN	OUT	IN	OUT
Staff	40*	-	-	60**
Couriers	2	2	-	-
Deliveries	2	2	-	-
Total:	44	4	-	60

* Warehouse/Workshop

** Warehouse/Workshop/Office/Showroom

It is apparent that the traffic generation outcome for the proposed development will be far less than that assessed in the SSD traffic assessment, particular in the PM peak where the projected outcome is less than half of what is approved for the site. Accordingly, the development will not present any unsatisfactory implications for the road system.

7.0 Construction Traffic Management Plan

A Construction Traffic Management Plan has been prepared for the Early Works processes for the BRBH. The elements of the Indicative Construction Traffic Management Plan in respect of SSD 6324 are as follows:

- ❖ Construction Hours: As per Consent Condition
- ❖ Hoarding/Fencing: A-Class fencing on site boundaries
- ❖ Vehicle Access: Driveway located towards the centre of the site boundary
- ❖ Truck Access: Via Bringelly Road access with Traffic Controller Supervision unless traffic control signals are operational
- ❖ Truck Routes: See Figure 6
- ❖ Establishment, Earthworks and Services: 3 weeks with 10-15 truck visitations per day
- ❖ Construction: 35 weeks with 4-5 truck deliveries per day (more during major concrete pours)
- ❖ Materials Handling and Storage: All contained within the site.

During the construction process, there will be a maximum of 70 workers on the site and it is apparent that the traffic activity during this process will be less than that when the development is completed and operational.

A draft CTMP will be submitted as part of the CFC development application process and will be updated as part of the detailed design and construction certificate.

FIG 6

8.0 Access, Internal Circulation and Servicing

8.1 Access

The proposed vehicle access arrangements for the development comprise:

- ❖ A 6m wide combined ingress/egress driveway centred on the western carpark
- ❖ A 12m wide combined ingress/egress driveway located towards the centre of the site for truck ingress and car park access
- ❖ An 8m wide egress driveway located at the eastern site boundary for truck egress

These driveways will accord with AS2890.1 and 2 design requirements, being located where good sight distances will be available.

8.2 Internal Circulation

The design of the internal arrangements including truck manoeuvring, carpark aisles/bays, etc. have been designed in accordance with AS2890.1, AS2890.2 and AS2890.6. Truck turning paths showing the satisfactory provision for circulation movements of articulated vehicles are provided in Appendix C.

8.3 Servicing

There will only be a relatively minor level of servicing required for the development (i.e., apart from receipt and dispatch movements). Each of the warehouse and workshop units will have a dedicated loading area while there will also be one recessed dock at the northern side of the building which is capable of accommodating up to a 24m B-Double truck. Refuse removal will be undertaken by contract vehicles while the expansive hardstand area will adequately provide for the standing of service vehicles. It is assessed on this basis that the proposed servicing arrangements will be adequate for the needs of the envisaged operations at the site.

9.0 Consultation Process

As part of the consultation process, a summary of the approaches/responses which form the basis of this assessment (and reproduced overleaf) was provided to TfNSW and RMS, while details of the email correspondence are provided in Appendix D.

Item No.	TPA Approach/Response
DoPE Letter: Traffic and Access	
1	An appropriately detailed/quantified traffic impact assessment report has been undertaken in response to this request.
2	Details of operational and construction traffic movements are provided in the TIA.
3	The proposed vehicular access arrangements for the site are consistent with the approved Masterplan. Pedestrian access and circulation are facilitated by a marked pedestrian crossing on the main entry roadway and separation of carparks from truck circulation area.
4	The proposed development outcome is lesser than that approved, and its corresponding traffic generation is also less than that approved for the site. As such, traffic implications associated with the proposal would not be any worse than the approved Masterplan's envisaged outcome.
5	Each unit (warehouse/workshop) will be provided with a loading area and a large recessed dock suitable for B-Doubles will be made available for tenants and advice provided by CFC (based on other similar operations) indicate only 4-5 such movements spread across the day. Parking provision is compliant with the DCP criteria. Appropriate provision has been made for bicycles and end of trip facilities have been incorporated in the design.
TfNSW Letter	
1	The estimate of daily and peak hourly traffic movements is detailed in the TIA.
2	The traffic assessment undertaken for the Bringelly Business Hub development (up until 2031) reveal a satisfactory intersection operation and this assessment has regard for the cumulative and background traffic growth in the region.
3	The proposed development outcome is lesser than that approved, and its corresponding traffic generation is also less than that approved for the site. As such, traffic implications associated with the proposal would not be any worse than the approved Masterplan's envisaged outcome.
4	Appropriate provision has been made for bicycles and end of trip facilities have been incorporated in the design.
5	The proposed vehicular access arrangements for the site are consistent with the approved Masterplan. Pedestrian access and circulation are facilitated by a marked pedestrian crossing on the main entry roadway and separation of carparks from truck circulation area.
6	Each unit (warehouse/workshop) will be provided with a loading area and a large recessed dock suitable for B-Doubles will be made available for tenants and advice provided by CFC (based on other similar operations) indicate only 4-5 such movements spread across the day. The estimated no. of other vehicle movements for the site is detailed in the TIA.
7	The proposed vehicular access arrangements for the site are consistent with the approved Masterplan which has regard for emergency vehicle movements.

Item No.	TTPA Approach/Response
8	Details of dangerous goods will be provided by relevant expertise.
9	A preliminary CTMP is incorporated in the TIA.
RMS Letter	
1	The traffic assessment undertaken for the Bringelly Business Hub development (up until 2031) reveal a satisfactory intersection operation and this assessment has regard for the cumulative and background traffic growth in the region.
2	The proposed vehicular access arrangements for the site are consistent with the approved Masterplan. Parking provision is compliant with the DCP criteria. Swept path diagrams for critical vehicles requiring access to the site are appended to the TIA.
3	The estimated no. of service vehicle movements for the site is detailed in the TIA.
4	Appropriate provision has been made for bicycles and end of trip facilities have been incorporated in the design. Assessment of sustainable travel options is incorporated in the TIA.

10.0 Conclusion

The proposed warehouse and showroom facility for CFC Group on Lot 6 in the BRBH represents a typical contemporary Business Park development outcome. The assessment, which has regard for the relevant SEARS requirements, has established that:

- ❖ the proposal is entirely consistent with the traffic analysis undertaken for the SSD 6324 (although the traffic generation outcome will be somewhat less)
- ❖ the proposal will not have any adverse traffic implications on the surrounding road network
- ❖ the proposed parking provision will be quite adequate and appropriate for the development and compliant with the SSD 6324 criteria
- ❖ the proposal will adequately provide for access, internal vehicle circulation and servicing

Appendix A

SEARs Requirements



Mr Paul Jewiss
Development Manager
CI Property
Suite 59, 26-32 Pirrama Road
Pyrmont NSW 2009

SSD 9511
DOC18/62044

Dear Mr Jewiss

**State Significant Development – Planning Secretary's Environmental Assessment Requirements
CFC Group Large Format Retail Building, Bringelly Road Business Hub (SSD 9511)**

Please find attached the Planning Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement (EIS) for the above-mentioned development. **Attachment 1** provides guidelines which may assist in the preparation of the EIS.

The attached SEARs have been prepared in consultation with the relevant government agencies and Liverpool City Council (see **Attachment 2**), and are based on the information you have provided to date. Unfortunately, NSW Roads and Maritime Services and Environment Protection Agency was unable to respond in time. The Department will provide you with a copy of its requirements as soon as it is received. The SEARs are based on the Preliminary Environmental Impact Statement dated 10 August 2018.

Please note the Planning Secretary may alter the SEARs at any time. You must consult further with the Department if you do not lodge a development application (DA) and EIS for the development within two years of the date of issue of these SEARs.

I wish to emphasise the importance of effective and genuine community consultation and the need for the proposal to proactively respond to the community's concerns. A comprehensive, detailed and genuine community consultation and engagement process must be undertaken during the preparation of the EIS. This process must ensure the community is informed of the development and engaged with issues of concern to it. Sufficient information must be provided to the community to enable a good understanding of the development and any potential impacts.

If the proposal is likely to have a significant impact on matters of National Environmental Significance, it may require an approval under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). If an EPBC Act approval is required, please advise accordingly, as the Commonwealth approval process may be integrated into the NSW approval process, and supplementary SEARs may need to be issued.

Please contact the Department at least **two weeks** before you lodge the EIS and any associated documentation for the development. This will enable the Department to confirm:

- the applicable fee (see Division 1AA, Part 15 of the *Environmental Planning and Assessment Regulation 2000*); and
- consultation and public exhibition arrangements.

If you have any enquiries, please contact Chloe Dunlop on 02 8289 6667 or via email at chloe.dunlop@planning.nsw.gov.au.

Yours sincerely

Chris Ritchie
Director

Industry Assessments
as the delegate of the Planning Secretary

31/8/18.

Planning Secretary's Environmental Assessment Requirements

Section 4.12(8) of the *Environmental Planning and Assessment Act 1979*
Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*

State significant development

Application Number	SSD 9511
Development	Construction and operation of a large format retail building with associated warehouse and workshop spaces, ancillary office, car parking and landscaping within the Bringelly Road Business Hub. The building will be for the display and sale of machinery and construction equipment.
Location	Lot 6 within Bringelly Road Business Hub located at Bringelly Road, Horningsea Park (Lot 11 DP 29104), Liverpool local government area
Applicant	CIP Constructions (NSW) Pty Ltd
Date of Issue	September 2018
General Requirements	The Environmental Impact Statement (EIS) must meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>. In addition, the EIS must include: • a detailed description of the development, including: – a description of the proposed operation – the need and justification for the proposed development – likely staging of the development – likely interactions between the development and any existing, approved and proposed developments in the vicinity of the site – plans of any proposed works with details of the proposed setbacks, site coverage, car parking, landscaped areas – details of infrastructure upgrades or items required to facilitate the development, and a description of any arrangements to ensure the upgrades will be implemented in a timely manner and maintained. • a detailed description of how the development is consistent with the Bringelly Road Business Hub concept approval (SSD 6324), particularly the approved land uses • consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments • a list of any approvals that must be obtained under the <i>Local Government Act 1993</i>, the <i>Roads Act 1993</i>, or any other Act or law before the development may lawfully be carried out • consideration of key issues identified by Government agencies and Liverpool City Council (see Attachment 2) • a risk assessment of any potential environmental impacts of the development, identifying the issues for further assessment • a detailed assessment, where relevant, of the key issues below, and any other potential significant issues identified in the risk assessment, which must include: – a description of the existing environment, including sufficient baseline data – an assessment of the potential impacts of the development, including any cumulative impacts due to other development in the vicinity – measures to avoid, minimise and if necessary, offset the predicted potential impacts, including strategies for adaptive management and/or contingency plans to manage any significant risks to the environment

	– a consolidated summary of all the proposed environmental management and monitoring measures, highlighting commitments included in the EIS. The EIS must also be accompanied by a report from a qualified quantity surveyor providing: • a detailed calculation of the Capital Investment Value (CIV) (as defined in clause 3 of the <i>Environmental Planning and Assessment Regulation 2000</i>) of the development, including details of all assumptions and components from which the CIV calculation is derived • a close estimate of the jobs that will be created by the development during the construction and operational phases • certification that the information provided is accurate at the date of preparation.
Key issues	The EIS must include an assessment of the potential impacts of the proposal (including cumulative impacts) and develop appropriate measures to avoid, mitigate, manage and/or offset these impacts. The EIS must address the following specific matters: • Community and Stakeholder Engagement – including: – a detailed community and stakeholder engagement strategy identifying who and how stakeholders will be engaged in the process – a report detailing the issues raised and how they have been addressed including any changes to the proposal – details of proposed engagement activities throughout the construction and operation of the development. • Social and Economic – including: – identifying and analysing the potential social impacts of the development from the point of view of the affected community and other relevant stakeholders – assessment of the significance of positive, negative and cumulative social impacts – mitigation measures and monitoring of likely negative social impacts – an analysis of any potential economic impacts of the development, including a discussion of any potential economic benefits. • Strategic Context – including: – detailed justification for the proposal having regard to its location and impacts, the suitability of the site and public interest – demonstration that the proposal is consistent with all relevant planning strategies, environmental planning instruments, adopted precinct plans, draft district plan(s) and adopted management plans and justification for any inconsistencies. The following documents must be addressed: ○ <i>State Environmental Planning Policy (Western Sydney Parklands) 2009</i> ○ the <i>Parklands Plan of Management 2020</i> ○ the <i>Parklands Plan of Management 2020 Supplement</i> ○ the <i>Parklands draft Plan of Management 2030</i> – justification for the proposed site layout. • Traffic and Access – including: – a quantitative Traffic Impact Assessment prepared in accordance with the relevant Council, Austroads and RM guidelines – details of all daily and peak traffic and transport movements likely to be generated by the development (vehicle type, public transport) during construction and indicative operation – details and a justification of access to, from and within the site (vehicular and pedestrian) – impacts on the safety and capacity of the surrounding road network (including intersections along Bringelly Road and Cowpasture Road) and access points, using SIDRA modelling or similar to assess impacts from current traffic counts and cumulative traffic from existing and proposed development

- demonstrate that sufficient loading/unloading, car parking and pedestrian and cyclist facilities have been provided for the development
- details of road upgrades, new roads or access points required for the development, if necessary.

- **Noise and Vibration** – including:

- a quantitative noise and vibration impact assessment undertaken by a suitably qualified person in accordance with the relevant Environment Protection Authority (EPA) guidelines and including an assessment of nearby sensitive receivers
- cumulative impacts of other developments
- details of proposed mitigation, management and monitoring measures.

- **Urban Design** – including:

- measures to minimise the potential visual impacts of the development including:
 - o a detailed assessment (including photomontages and perspectives) of the proposed development including height, colour, scale, building materials and finishes, signage and lighting, particularly from nearby residential receivers
 - o detailed plans showing suitable landscaping
 - o justification for any inconsistencies with the Updated Site Design Guidelines prepared by JBA Urban Planning Consultants, dated June 2015 as amended and approved under Condition A8 of the development consent for SSD 6324.

- **Bushfire** – including:

- a bushfire assessment report which provides an assessment of bushfire hazard, including:
 - o details of the storage of flammable materials
 - o an assessment against the requirements of *Planning for Bushfire Protection 2006*, particularly access and provision of water supply for firefighting purposes
 - o a description of measures to ensure the proposal will not increase the bushfire risk to adjoining lands.

- **Soil and Water** – including:

- a description of water demands of the development and a breakdown of water supplies
- identify any water licensing requirements under the *Water Act 1912* of *Water Management Act 2000*
- details of proposed erosion and sediment controls during construction
- detailed plans and a description of the surface and stormwater management system, including on-site detention, designed in accordance with Water Sensitive Urban Design principles
- an assessment of potential flooding impacts
- an assessment of potential impacts (including from potential spillage of materials) on surface and groundwater resources, drainage patterns, soil (stability, salinity and acid sulfate soils), related infrastructure, watercourses and riparian land and proposed mitigation measures.

- **Hazards and Risk** – including:

- a preliminary risk screening completed in accordance with *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development and Applying SEPP 33* (DoP, 2011), with a clear indication of class, quantity and location of all dangerous goods and hazardous materials associated with the development. Should preliminary screening indicate that the project is “potentially hazardous” a preliminary hazard analysis (PHA) must be prepared in accordance with *Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis* (DoP, 2011) and *Multi-Level Risk Assessment* (DoP, 2011)
- report on consultation with pipeline operator Jemena to ensure that any nearby high pressure gas pipelines remain compliant with the relevant Australian Standards throughout the life of the development and include a Safety Management Study, if necessary.



Chloe Dunlop
Senior Planning Officer
Industry Assessments
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Ms Dunlop,

**Request for Input to SEARs for proposed CFC Large Format Retail Premises at
Bringelly Road Business Hub (SSD 9511)**

Thank you for your correspondence dated 13 August 2018 requesting Transport for NSW (TfNSW) input to the Secretary's Environmental Assessment Requirements (SEARs) for the subject State Significant Development Application (SSDA).

The following key assessment requirements should be addressed within the SSD EIS:

- an estimate of the total daily and peak hour trips generated by the proposal, including vehicle, public transport, pedestrian and bicycle trips;
- the daily and peak (AM and PM) vehicle movements impact on nearby intersections, with consideration of the cumulative impacts from the likely developments in the remaining lots and the need for any additional funding for upgrading or road improvement works, if required;
- a comparative assessment against the intersection analysis undertaken for the concept plan of future intersection operation at Bringelly Road and the site access road;
- proposed car and bicycle parking provision, including consideration of the availability of public transport and the requirements of the relevant parking codes and Australian Standards;
- provision of end of trip facilities (i.e. showers, lockers, change rooms etc.) for the use of employees who choose to walk or cycle to/from work as well as undertake activities during work hours;
- the proposed access arrangements from the development to public transport and cycling networks and an assessment of the adequacy of each access route;
- service vehicle access, delivery and loading arrangements and estimated service vehicle movements (including vehicle type and the likely arrival and departure times);
- details of access arrangements for emergency vehicles;

- details of any likely dangerous goods to be transported on arterial and local roads to/from the site, if any, and the preparation of an incident management strategy, if necessary; and
- Preparation of a draft/preliminary Construction Traffic Management Plan which includes:
 - assessment of cumulative impacts associated with other construction activities;
 - an assessment of road safety at key intersection and locations subject to heavy vehicle construction traffic movements and high pedestrian activity;
 - details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process;
 - details of anticipated peak hour and daily construction vehicle movements to and from the site;
 - details of access arrangements of construction vehicles, construction workers to and from the site, emergency vehicles and service vehicle;
 - Details of vehicle routes, number of trucks, hours of operation, access arrangements and traffic control measures for all demolition/construction activities.
 - details of temporary cycling and pedestrian access during construction;
 - details of proposed construction vehicle access arrangements at all stages of construction; and
 - measures to mitigate any associated construction impacts on traffic, pedestrian, cyclists, parking and public transport.

If you require clarification with any of the information provided above, please contact Billy Yung, Senior Transport Planner, via email at billy.yung@transport.nsw.gov.au.

Yours sincerely



21/8/2018

Mark Ozinga
Principal Manager, Land Use Planning & Development
Freight, Strategy & Planning

CD18/07429

4 September 2018

Our Reference: SYD18/01266 (A23893273)
DP&E Ref: SSD 18_9511

Director/Team Leader
Industry Assessments
Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Chloe Dunlop

Dear Sir/Madam

**CFC Retail Showroom, Warehouse and Workshop with Ancillary Office
Skyline Crescent, Leppington**

Reference is made to your correspondence dated 13 August 2018 requesting Roads and Maritime Services (Roads and Maritime) to provide details of key issues and assessment requirements regarding the abovementioned development for inclusion in the Secretary's Environmental Assessment Requirements (SEARs).

Roads and Maritime requires the following issues to be included in the transport and traffic impact assessment of the proposed development:

1. Daily and peak traffic movements likely to be generated by the proposed development including the impact on nearby intersections and the need/associated funding for upgrading or road improvement works (if required). The key intersections to be examined/modelled include:
 - Bringelly Road / Cowpasture Road
 - Bringelly Road / Skyline Crescent
2. Details of the proposed accesses and the parking provisions associated with the proposed development including compliance with the requirements of the relevant Australian Standards (ie: turn paths, sight distance requirements, aisle widths, etc) and relevant parking codes. Swept path plans need to be provided.
3. Details of service vehicle movements (including vehicle type and likely arrival and departure times).
4. Roads and Maritime requires the environmental assessment report to assess the implications of the proposed development for non-car travel modes (including public transport use, walking and cycling); the potential for implementing a location-specific sustainable travel plan and the

provision of facilities to increase the non-car mode share for travel to and from the site. This will entail an assessment of the accessibility of the development site by public transport.

The subject property is affected by a Road Widening Order under Section 25 of the Roads Act, 1993 as published in Government Gazette 105 of 20 August 1965 Folio 2660, and shown by pink colour on the attached Aerial "X" and defined by DP 225208 and noted on title, along the old Bringelly Road corridor. Any new buildings or structures, together with any improvements integral to the future use of the site, are to be erected clear of the land reserved for road (unlimited in height or depth).

The proponent should also be advised that this old Bringelly Road corridor is, pursuant to State Environmental Planning Policy Sydney Growth Centres, subject to a proposed road widening (SP2 Classified Road) as shown by yellow colour on the attached Aerial — "X".

The applicant should also be made aware that the proposed development is within close proximity to the Bringelly Road Stage 1 Project. Roads and Maritime's project will not be completed until December 2018 and as such the traffic signals at the intersection of Skyline Cres/Bringelly Road will not be operational until this time.

Any inquiries in relation to this Application can be directed to Amanda Broderick on 8849 2391 or development.sydney@rms.nsw.gov.au.

Yours sincerely



Pahee Rathana

**AI Senior Land Use Assessment Coordinator
North West Precinct**

“X”

2
DP877703

5
DP29104

9
DP29104

10
DP29104

ALL PROPERTY ENQUIRIES AND DEVELOPMENT
APPLICATIONS TO BE REFERRED TO
ROY SURACE FOR COMMENT
S.RKD 28/5/13

11
DP29104

12
DP29104

BRINGELLY RD

8
DP1201906

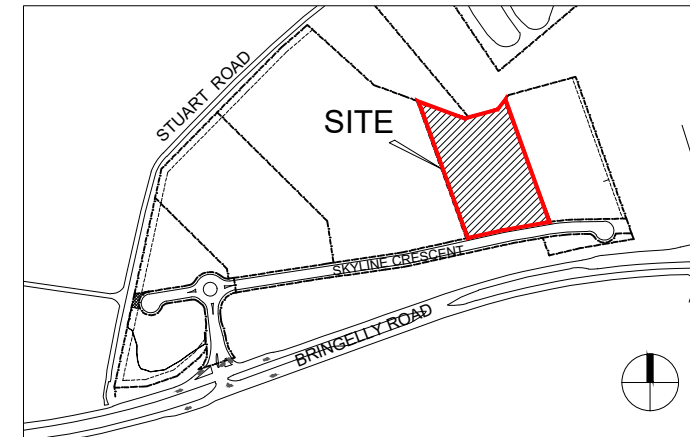
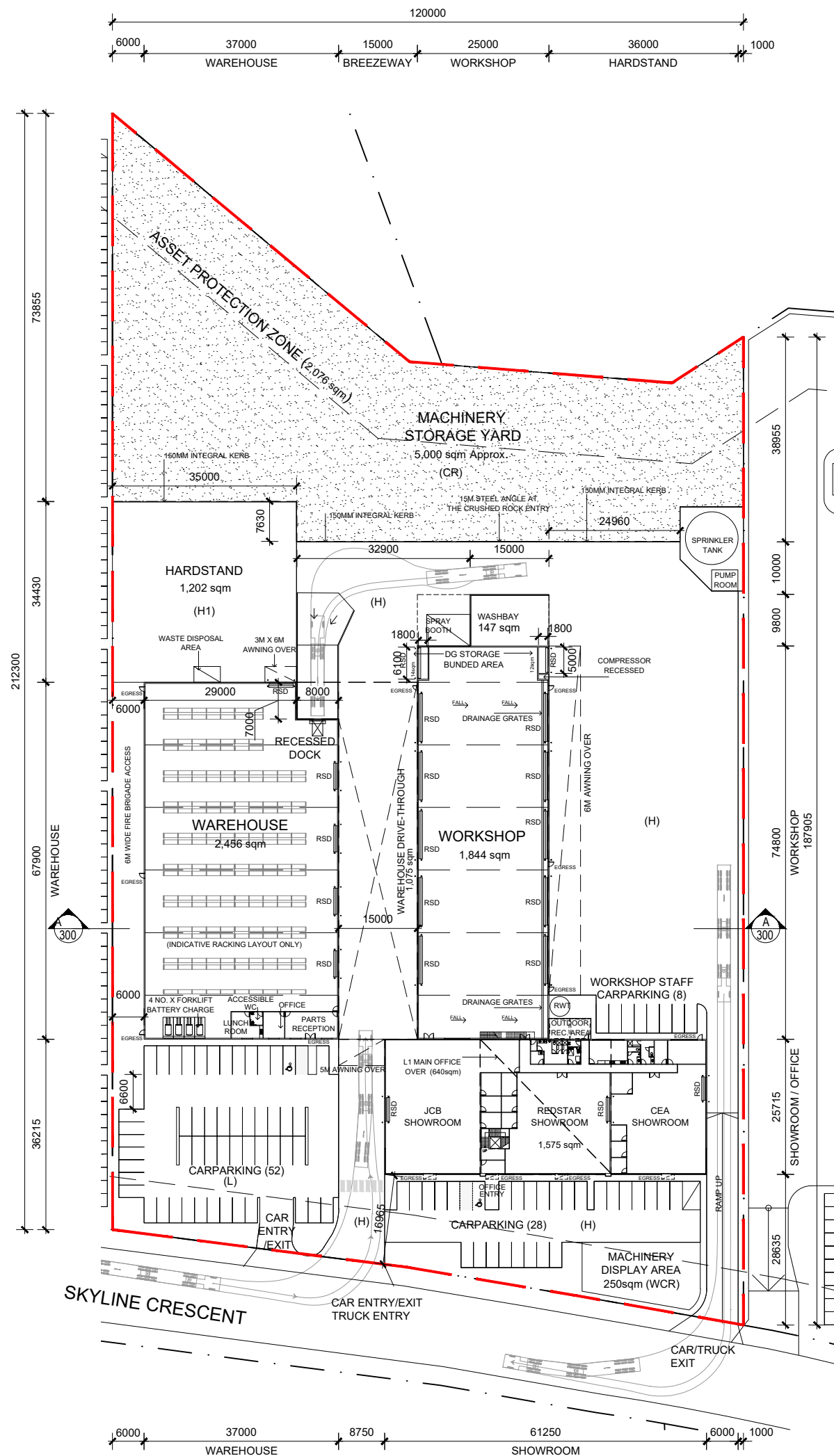
22
DP19406

1
DP876864

2
DP876864

Appendix B

Architectural Plans



LOCATION PLAN N.T.S

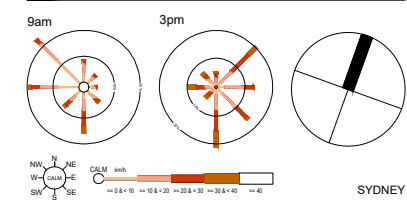
© COMMERCIAL & INDUSTRIAL PROPERTY PTY LTD. THIS DRAWING IS COPYRIGHT. APART FROM PERMITTED DEALINGS UNDER THE COPYRIGHT ACT, THIS DRAWING MAY NOT BE REPRODUCED BY ANY PERSON WITHOUT PERMISSION IN WRITING. ALL AREAS AND DIMENSIONS SHOWN ON DRAWINGS ARE APPROXIMATE ONLY AND ARE SUBJECT TO CONFIRMATION BY SURVEY

REVISIONS

A	PRELIMINARY	22.05.18
B	PRELIMINARY	25.05.18
C	Breezeway rename to "Warehouse drive-through"	20.08.18
D	DEVELOPMENT SUMMARY UPDATED.	27.08.18
E	CO-ORDINATION ISSUE	04.09.18
F	CO-ORDINATION ISSUE	06.09.18
G	ISSUE FOR CLIENT REVIEW	17.09.18
H	RE-LOCATED SPRINKLER TANK/PUMP ROOM/RWT	24.09.18

DEVELOPMENT SUMMARY

SITE AREA	22,052 sqm
WAREHOUSE (INCLUDING OFFICE & AMENITIES)	2,456 sqm
WORKSHOP (INCLUDING COMPRESSOR RECESSED AREA)	1,844 sqm
DG STORAGE BUNDED AREA	26 sqm
WASHBAY	147 sqm
SHOWROOM (GROUND)	1,575 sqm
MAIN OFFICE (LEVEL 1)	640 sqm
WAREHOUSE DRIVE-THROUGH	1,075 sqm
TOTAL BUILDING AREA	7,763 sqm
SITE EFFICIENCY	35.21 %
AWNING (6m)	398 sqm
CARPARKING PROVIDED	88 spaces
HEAVY DUTY PAVEMENT (H) (EXCLUDING U/S OF BREEZEWAY)	5,633 sqm
LIGHT DUTY PAVEMENT (L)	1,344 sqm
HARDSTAND AREA (H1)	1,202 sqm
WASHED CRUSHED ROCK (WCR)	250 sqm
MACHINERY STORAGE YARD (CR)	5,000 sqm



PROJECT
CFC GROUP
BRINGELLY ROAD
BUSINESS HUB,
NSW

DRAWING TITLE
PROPOSED SITE PLAN



CREATE DATE : 22.05.2018 PLOT DATE : 25.05.2018

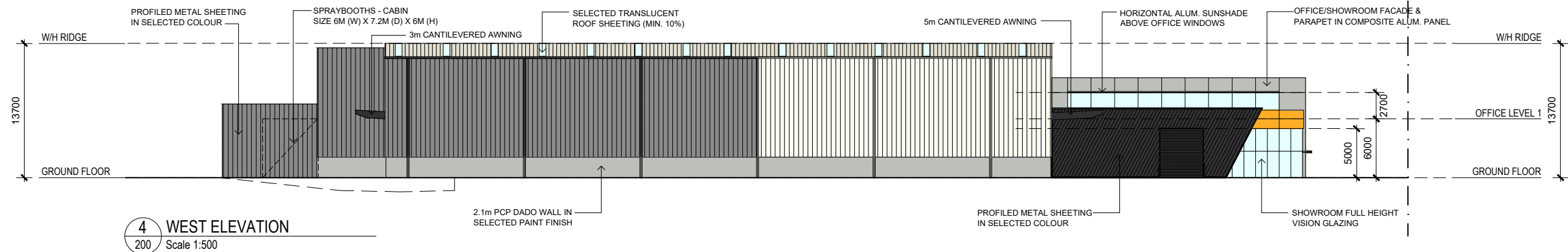
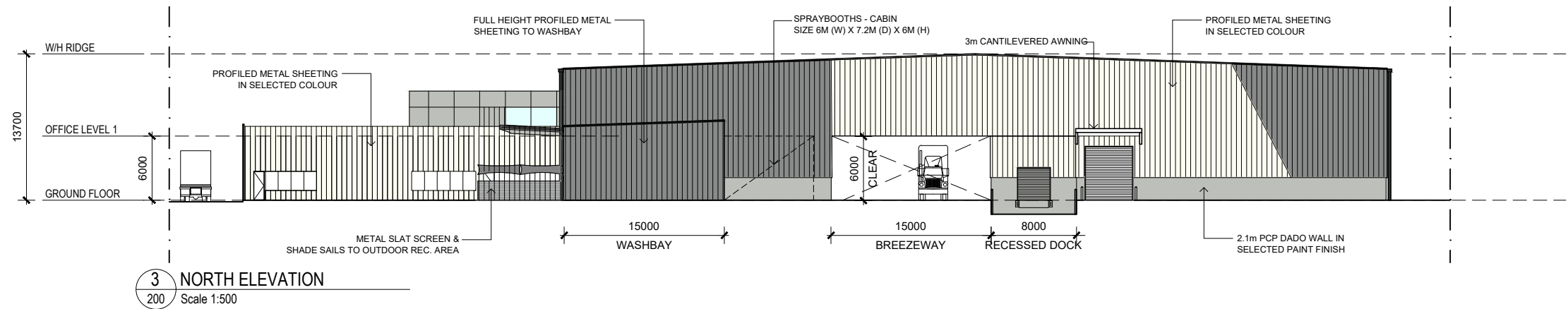
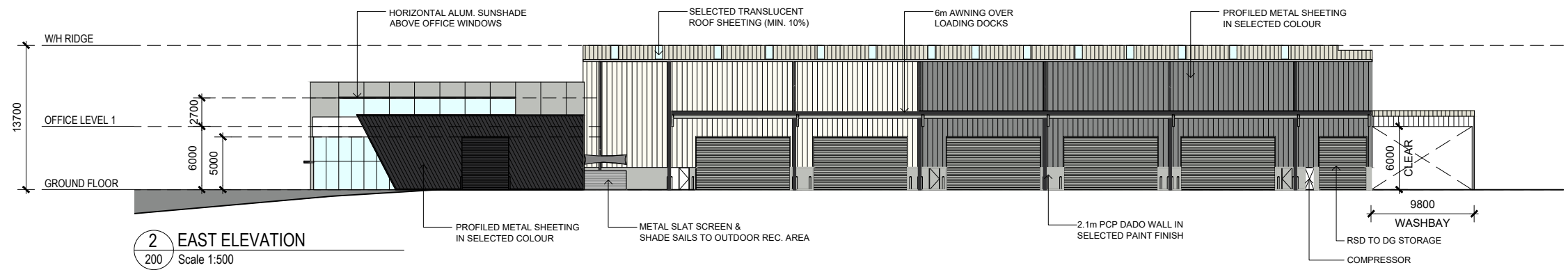
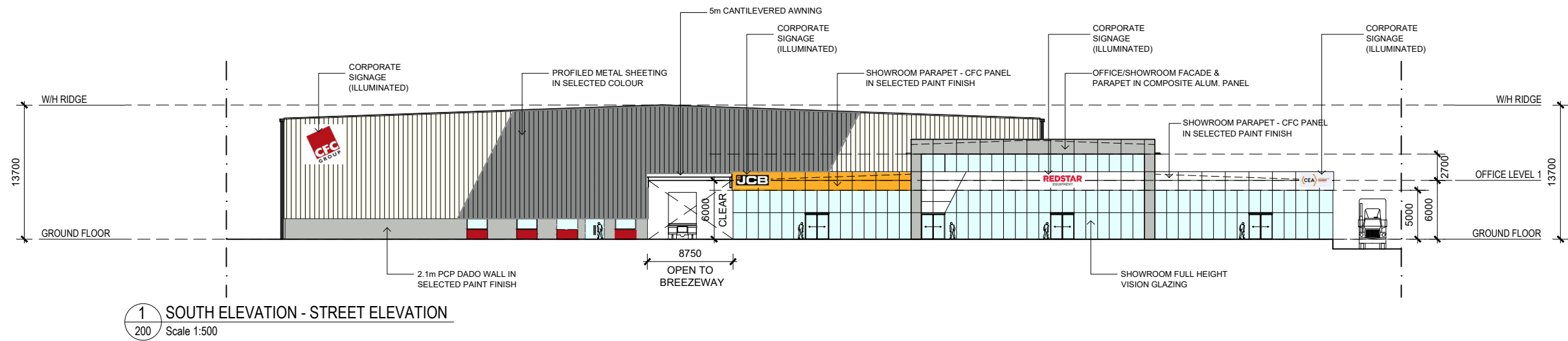
LAST SAVED BY : awong

2-352-275907-FS20 -003 H

DISCLAIMER - LEVELS AND LAYOUTS
ARE INDICATIVE ONLY AND SUBJECT
TO FINAL DESIGN

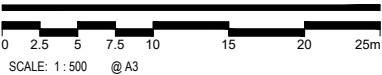
REVISIONS

A	PRELIMINARY	25.05.18
B	CO-ORDINATION ISSUE	04.09.18



PROJECT
CFC GROUP
BRINGELLY ROAD
BUSINESS HUB,
NSW

DRAWING TITLE
ELEVATIONS

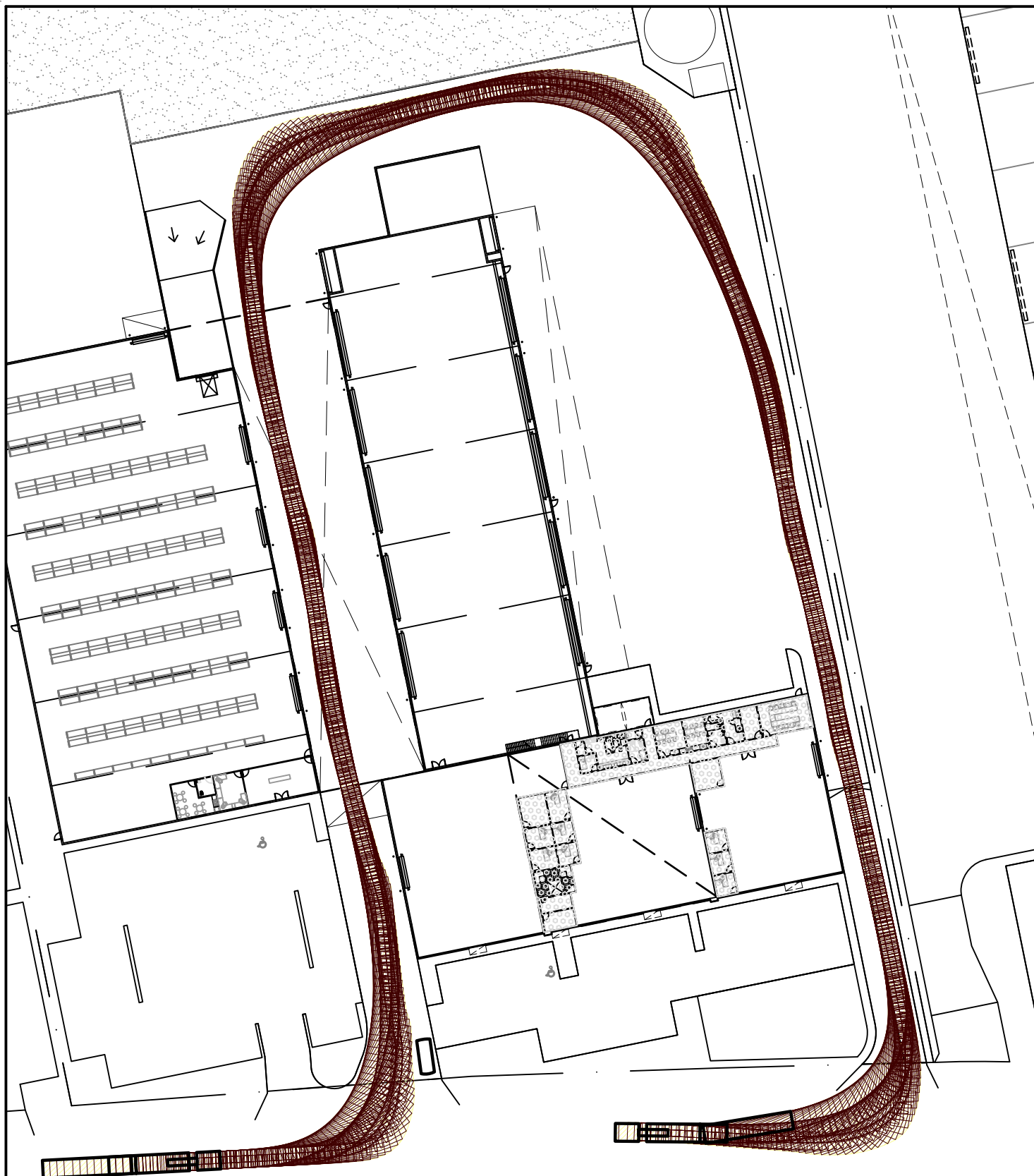


CREATE DATE : 21.09.2018 PLOT DATE : 25.05.2018
LAST SAVED BY: awong

2-352-275907-FS20 on 1 **B**

Appendix C

Turning Path Assessment



LEGEND

This drawing has been prepared using vehicle modelling computer software AutoTrack V5.00a in conjunction with AutoCAD 2013. The vehicle used is based upon vehicle data provided by Austroads and incorporates a reasonable degree of tolerance. However, it is not possible to account for all vehicle types/characteristics and/or driver ability.



**SWEPT PATH ANALYSIS
OF A 25m ARTICULATED
VEHICLE ENTERING AND
EXITING THE SITE**

SP 1



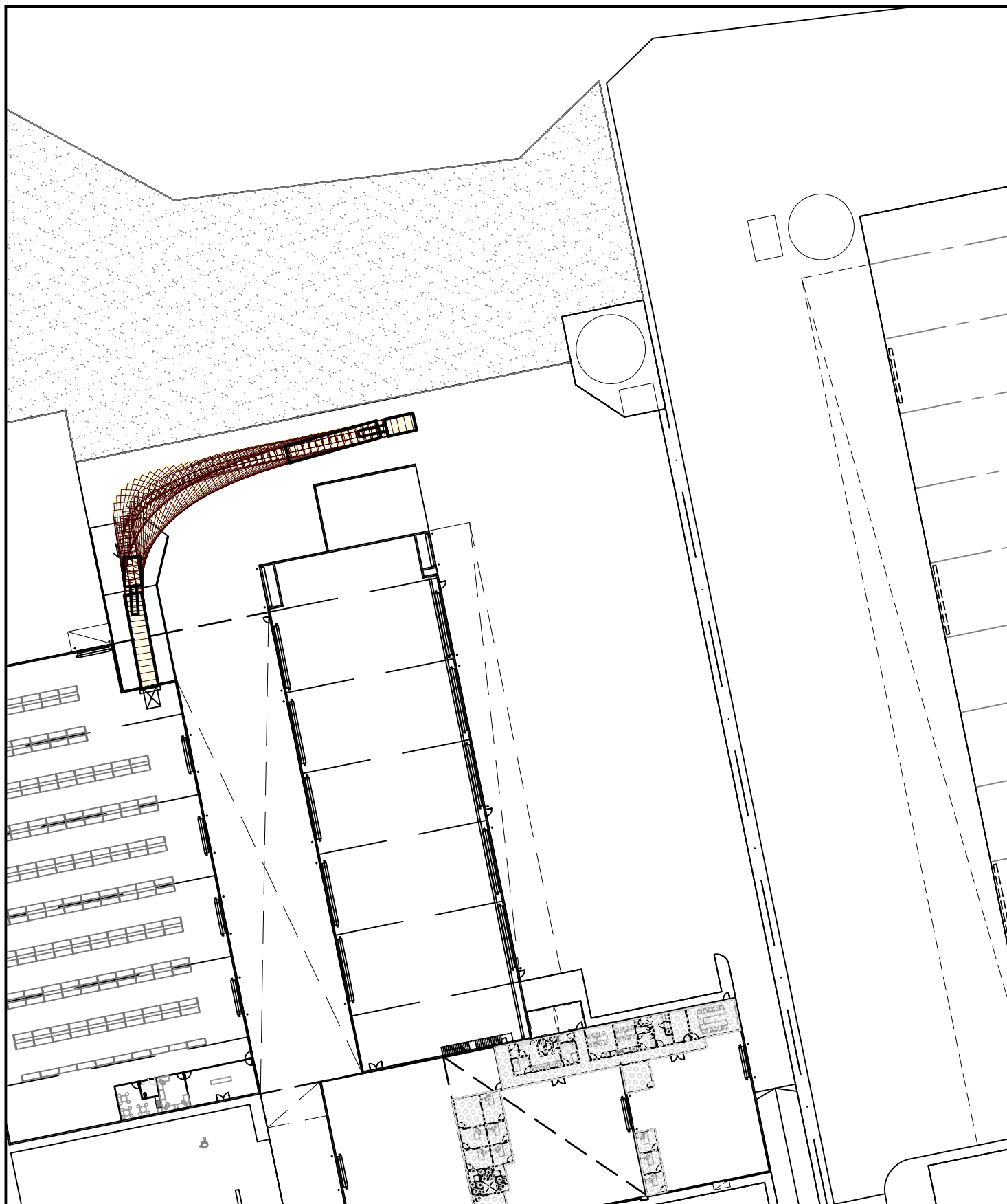
LEGEND

This drawing has been prepared using vehicle modelling computer software AutoTrack V5.00a in conjunction with AutoCAD 2013. The vehicle used is based upon vehicle data provided by Austroads and incorporates a reasonable degree of tolerance. However, it is not possible to account for all vehicle types/characteristics and/or driver ability.



**SWEPT PATH ANALYSIS
OF A 19m ARTICULATED
VEHICLE ENTERING THE SITE**

SP 2



LEGEND

This drawing has been prepared using vehicle modelling computer software AutoTrack V5.00a in conjunction with AutoCAD 2013. The vehicle used is based upon vehicle data provided by Austroads and incorporates a reasonable degree of tolerance. However, it is not possible to account for all vehicle types/characteristics and/or driver ability.



**SWEPT PATH ANALYSIS
OF A 19m ARTICULATED
VEHICLE EXITING THE SITE**

SP 3

Appendix D

Consultation Process

Bernard Lo

From: Bernard Lo <bernard@ttpa.com.au>
Sent: Thursday, 6 September 2018 5:58 PM
To: 'billy.yung@transport.nsw.gov.au'; 'BRODERICK Amanda J'; 'chloe.dunlop@planning.nsw.gov.au'
Subject: Re: SSD 9511
Attachments: CFC GROUP PROJECT CONSULTATION SUMMARY 06092018 ISSUE A.pdf
Importance: High

Dear Amanda, Chloe and Billy,

As required by the SEARs requirements, I attach herewith our tabulated approach and responses to the relevant SEARs items which briefly demonstrate how we intend to address the detailed traffic assessment for this proposal.

I invite you to contact myself at 9411 5660 should you require further clarification to the attached details.

Kind regards,

Bernard Lo | Director

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

Established 1994

Suite 502, Level 5, 282 Victoria Avenue, Chatswood NSW 2067

P (02) 9411 5660 **F** (02) 9904 6622 **W** ttpa.com.au

